

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for preparing a functionalized, branched
high functionality highly branched polyureas polyurea, the process consisting of which
comprises

reacting at least one urea, at least one thiourea, or a combination thereof ~~one or more~~
ureas with at least one amine ~~one or more amines~~ having at least ~~[[two]]~~ three primary and/or
secondary amino groups, and optionally, at least one amine having at least two primary and
/or secondary amino groups, to form the functionalized, branched polyurea;

~~process comprises at least one amine having at least three primary and/or secondary~~
~~amino groups~~

wherein any amine or combination of amines reacted with the at least one urea, at
least one thiourea, or a combination thereof, has an average amine functionality of from 2.1
to 10,

wherein, optionally, the reacting is conducted in the presence of a solvent,

wherein, optionally, the reacting is conducted in the presence of at least one catalyst,

wherein, optionally, an amine liberated during the reacting is separated off by
distillation, and

wherein, optionally, the functionalized, branched polyurea is, post formation, subject
to a subsequent functionalization.

Claim 2 (Currently Amended): ~~[[A]]~~ The process according to claim 1, wherein the
process comprises the at least one amine having at least two ~~more amines having two~~
primary and/or secondary amino groups ~~are reacted, and~~

wherein the at least one amine having at least two primary and/or secondary amino groups is ~~these amines being~~ selected from the group consisting of ethylenediamine, an N-alkylethylenediamine, propylenediamine, 2,2-dimethyl-1,3-propanediamine, N-alkylpropylenediamine, butylenediamine, N-alkylbutylenediamine, pentanediamine, hexamethylenediamine, N-alkylhexamethylenediamine, heptanediamine, octanediamine, nonanediamine, decanediamine, dodecanediamine, hexadecanediamine, tolylenediamine, xylylenediamine, diaminodiphenylmethane, diaminodicyclohexylmethane, phenylenediamine, cyclohexylenediamine, bis(aminomethyl)cyclohexane, diaminodiphenyl sulfone, isophoronediamine, 2-butyl-2-ethyl-1,5-pentamethylenediamine, 2,2,4- or 2,4,4-trimethyl-1,6-hexamethylenediamine, 2-aminopropylcyclohexylamine, 3(4)-aminomethyl-1-methylcyclohexylamine, 1,4 diamino-4-methylpentane, amine-terminated polyoxyalkylene polyols having two amino groups, ~~[[and]]~~ amine-terminated polytetramethylene glycols having two amino groups, and combinations thereof.

Claim 3 (Currently Amended): ~~[[A]]~~ The process according to claim 1, wherein the at least one amine having at least three primary and/or secondary amino groups is selected from the group consisting of bis(aminoethyl)amine, bis(aminopropyl)amine, bis(aminobutyl)amine, bis(aminopentyl)amine, bis(aminohexyl)amine, tris(aminoethyl)amine, tris(aminopropyl)amine, tris(aminohexyl)amine, trisaminohexane, 4-aminomethyl-1,8-octaenediamine, trisaminononane, N-(2-aminoethyl)propanediamine, N,N'-bis(3-aminopropyl)ethylenediamine, N,N'-bis(3-aminopropyl)butanediamine, N,N,N',N'-tetra(3-aminopropyl)ethylenediamine, N,N,N',N'-tetra(3-aminopropyl)butanediamine, melamine, an oligomeric diaminodiphenylmethane ~~diaminodiphenylmethanes~~ (polymer MDA), an amine-terminated polyoxyalkylene polyol ~~polyols~~ with a functionality of three or

more, ~~polyethyleneimines~~ a polyethyleneimine with a functionality of three or more, ~~[[or]]~~ a ~~polypropyleneimines~~ polypropyleneimine with a functionality of three or more, and combinations thereof.

Claim 4 (Currently Amended): ~~[[A]]~~ The process according to claim 1, wherein the at least one urea, at least one thiourea, or a combination thereof is selected from the group consisting of urea, thiourea, ethyleneurea, 1,2-propyleneurea, ~~[[or]]~~ 1.3-propyleneurea, N,N'-diphenylurea, N,N'-ditolylurea, N,N'-dinaphthylurea, N-methyl-N'-phenylurea, N-ethyl-N'-phenylurea, N,N'-dibenzylurea, N,N'-dimethylurea, N,N'-diethylurea, N,N'-dipropylurea, N,N'-dibutylurea, N,N'-diisobutylurea, N,N'-dipentylurea, N,N'-dihexylurea, N,N'-diheptylurea, N,N'-dioctylurea, N,N'-didecylurea, N,N'-didodecylurea, carbonylbiscaprolactam, ethylenethiourea, propylenethiourea, N-methylthiourea, N-ethylthiourea, N-propylthiourea, N-butylthiourea, N-phenylthiourea, N-benzylthiourea, N,N'-dimethylthiourea, N,N'-diethylthiourea, N,N'-dipropylthiourea, N,N'-dibutylthiourea, N,N,N',N'-tetramethylthiourea, N,N,N',N'-tetraethylthiourea, thiocarbonyldiimidazole, ~~[[and]]~~ thiocarbonylbiscaprolactam, and combinations thereof.

Claim 5 (Currently Amended): ~~[[A]]~~ The process according to claim 1, wherein any amine or combination of amines reacted with the at least one urea, at least one thiourea, or a combination thereof, has an average amine functionality of from 2.1 to 5

~~an amine or an amine mixture having an average amine functionality of from 2.1 to 10 is reacted.~~

Claim 6 (Currently Amended): ~~[[A]] The process according to claim 1, wherein the reacting is conducted in the presence of a solvent reaction of the urea or ureas with the amine or amines takes place in a solvent.~~

Claim 7 (Currently Amended): ~~[[A]] The process according to claim 6, wherein the solvent is selected from the group consisting of decane, dodecane, benzene, toluene, chlorobenzene, dichlorobenzene, xylene, dimethylformamide, dimethylacetamide, and solvent naphtha, and combinations thereof.~~

Claim 8 (Currently Amended): ~~[[A]] The process according to claim 1, wherein the reacting is conducted in the absence of a solvent reaction takes place in the absence of an inert solvent.~~

Claim 9 (Currently Amended): ~~A functionalized, branched polyurea prepared by the process of claim 1 High functionality highly branched polyureas preparable by the process according to claim 1.~~

Claim 10 (Cancelled).

Claim 11 (New): The process of claim 1, wherein the reacting is conducted in the absence of a catalyst.

Claim 12 (New): The process of claim 1, wherein the reacting is conducted in the presence of at least one catalyst.

Claim 13 (New): The process of claim 12, wherein the at least one catalyst is selected from the group consisting of an alkali metal hydroxide, an alkaline earth metal hydroxide, an alkali metal hydrogen carbonate, an alkaline earth metal hydrogen carbonate, an alkali metal carbonate, an alkaline earth metal carbonate, a tertiary amine, an ammonium compound, an organic compound of aluminum, an organic compound of tin, an organic compound of zinc, an organic compound of titanium, an organic compound of zirconium, an organic compound of bismuth, and combinations thereof.

Claim 14 (New): The process of claim 12, wherein the catalyst is potassium carbonate.

Claim 15 (New): The process of claim 1, wherein the reacting is conducted in the presence of at least one catalyst, and wherein the reacting is conducted in the absence of a solvent.

Claim 16 (New): The process of claim 15, wherein an amine liberated during the reacting is not separated off by distillation.

Claim 17 (New): The process of claim 15, wherein an amine liberated during the reacting is separated off by distillation.

Claim 18 (New): The process of claim 1, wherein the functionalized, branched polyurea is, post formation, subject to a subsequent functionalization.

Claim 19 (New): The process of claim 1, wherein the functionalized, branched polyurea is not, post formation, subject to a subsequent functionalization.

Claim 20 (New): The process of claim 1, wherein the reacting is conducted at a temperature of from 0 °C to 250 °C.

Claim 21 (New): The process of claim 1, wherein the reacting is conducted at a temperature of from 60 °C to 180 °C.